REMARKS

In the Office Action mailed January 23, 2006 Claims 1-3, 5-20, 35-37, 58 and 60-75 are currently pending. Claims 1-3, 5-20, 35-37, 58 and 60-75 are rejected under 35 U.S.C. 102(e) as being allegedly anticipated by Wong et al. (U.S. Patent No. 6,968,364) ("Wong '364").

Applicants respectively traverse. After a careful review of the Office Action, the cited references, and Applicants' presently pending claims, Applicants respectively request reconsideration in view of the following remarks.

I.   CLAIM REJECTIONS UNDER 35 U.S.C. § 102(e)

Claims 1-3, 5-20, 35-37, 38 and 60-75 stand rejected under 35 U.S.C. § 102(e) as being allegedly anticipated by Wong '364. Applicants respectively traverse.

II.   APPLICANT'S PRESNETLY CLAIMED INVENTION

Applicant's presently claimed invention relates generally to enabling web users easy access and control of media-based devices and appliances over computer networks, and more specifically, to a method, system and computer medium for remote control of a digital video recorder from a client user interface both in communication with the internet. Applicant's Specification pg. 2, ¶ [0007].

Importantly, and as Applicants explain referring to the block diagrams of FIGs. 3 and 4B, the servers 28-1 through 28-n included in an embodiment of network computing system 12a are described in detail. For convenience and ease of understanding the invention, reference will interchangeably be made to "servers 28" to generically describe features of servers 28-1 through 28-n. Also for convenience, like reference numerals have been used for similar components used in both the client computer 18, and the servers 28. Servers 28 are generally responsible for presenting the front end 14a of computer system 10A to a user at the client 18. In one

embodiment, servers 28 may be web portals, which is defined to mean a web "supersite" that

provides a variety of online services. Alternatively, servers 28 may be web-sites provided by

and/or web-hosted by unrelated entities and system administrators. These particular

embodiments are well-suited for the situation when network 24 is the Internet. Applicant's

Specification pg. 27, ¶ [0091].

Referring to FIG. 4B, Applicants explain further details of a particular embodiment of a

main memory unit 78B for a server 28 are shown, by way of example. In the embodiment of

FIG. 4B, the memory unit 78B preferably comprises an operating system 88, other applications

90, server application programs 92 ("servers 92"), and a "front end" server application 94, all

communicatively coupled together via system bus 74. Server 92 may be any conventionally

known server application, like for example, and Apache HTTP server. Front end server

application 94 is an interface for establishing communication with the middle tier server 40 by

sending and receiving requests and data to the API. In general, servers 28 may host front end

14a and are typically external websites relative to systems 14a and 16a. Because servers 28 can

represent a variety of general purpose websites, some functioning as a "supersite" that provide

various online services, while others being for more limited purposes, for convenience and to

avoid obscuring the invention with unnecessary details, reference to server 28 will

interchangeably be made herein to "web portals 280." Applicant's Specification pg. 28, ¶

[0093].

Applicants' FIG. 13A presents a data flow diagram illustrating the process 230 of one

method for a user to obtain information from and provide instructions to systems 10A and 10B.

FIG 13B is a sequence diagram illustrating further details regarding the data flow of FIG. 13A.

Throughout this figure, data flow lines (used interchangeably with "steps") reflect an order in

which part of the method is preferably practiced. In the description to follow, occasional reference will also be made to FIGs. 2 and 5. Before the process 230 of obtaining information from and providing instructions to system 10A and 10B begins, a user navigates to 229 a website for one of the servers 28-1,...m 28-n, which responds with an appropriate web page 231. The process 230 begins with the user login 232 into system 10A or 10B. A user enters identifying information, as for example, in the user interface 180 of FIG. 11. A user name and password are transmitted from the client browser to the database as indicated by steps 232, 234 and 236 in Fig. 13B. Once the user is authenticated with predetermined information on the database, a first page 190 of information such as an EPG is shown in Fig. 12A is formation 240 from data received from the database 238, and is forwarded 242 to client browser 20. Such first page 190 of information, as well as subsequent pages, may include drop-down menus such as those illustrated in FIG. 12B, as well as buttons such as the "Go" button 192 seen in FIG. 12A. The user may select a desirable entry within each drop-down menu and/or click on the "Go" button 192 to invoke a command. Upon doing so, the browser 20 sends a HTTP request to an already connected web server such as 28-1, as shown in step 232. Those skilled in the art will recognize that the drop-down menu and button-driven features may be implemented in a variety of ways. Applicant's Specification pg. 57-58, ¶ [0159].

The middle tier server 40 assembles the retrieved data and updated information into formatted data, which are forwarded 240 to the web server 28-1. It is noted that the API on the middle tier server 40 includes that programmable logic to package (i.e., format) data received in a raw format into a form that is well-suited for flexibly defining data structures. One format that is advantageous is XML because it allows the tagging of data in a manner that is not tightly coupled together, thereby providing more flexibility in defining data structures. Other formats,

though, will work suitably well with the described embodiments of the present invention, including HTML. Applicant's Specification pg. 58, ¶ [0161].

The middle tier server 40 enables communication between various web portals 28-1...28-n and the database 44 through an API, which facilitates the communication of user instructions and operations for controlling the DVR 37 with the front end 14a. One technical advantage of the API is that it allows a portal (e.g., 28-2) to cache information received from the middle tier server 40 locally within the environment of the particular portal such as 28-2 with a frequency based upon when a user is interested in the information. Furthermore, the API of the described embodiment of the present invention is flexible so as to permit a portal 28-2 to present the content of information from the middle tier server 40 in a manner that enables display of information using proprietary types of graphical user interfaces (i.e., GUIs) distinctive to those system administrators operating the particular portal (e.g., 28-2). Business logic (e.g., checking of time conflicts for recording disk space) may be included in the middle tier server 40 to form a part of the API that provides a standardized mechanism for receiving request forwarded from the portals 28-1...28-n, and for sending back a corresponding response.

In order for the web server 28-1,...,28-n such as portal 28-2 to present the interactive television device data a the web browser 20, each web portal is enabled to use, copy , encode, store, archive, distribute, transmit, modify, translate, render into an audible format, publicly display and publicly perform the content received from database 44, in while or in part in connection with the property of the web portals 28-1, ..., 28-n. The API enables the web portals to allow users at the browser 20 to download and print or perform the content. This content includes the interactive television device data, like for example, a top watched shows list. The API of the described embodiments of the present invention permits the content to fit the format

and look-and-feel of the particular web portal. Applicant's Specification pg. 59-60, ¶ ¶ [0162, 0163].

Applicant's FIG. 16B illustrates on a high level how a web server, e.g., portal 28-2, may utilize the API routines to access and manipulate data in the databases 268 in response to various user requests 260 in accordance with one embodiment of the present invention. Note that database 44 in FIG. 2 and in FIG. 5 is merely illustrative, and that the embodiment shown in FIG. 16B, which illustrates four databases 280, 282, and 284 and 286 each of which will be described below, works suitably well. The API routines 264 shown in FIG. 16B are designed to extract data from and to insert instructions into the databases 268. The predominant directions of data flows are indicated in the figure by the directions of the arrows connecting each routine to one or more databases. However, some parameters or exchange of triggering data is presumed to have occurred before any substantial amount of data is transferred to or from the databases 268. The database 280 contains information related to the user and comprises, for example, a replica of a commercial authentication database such as SilkNet™ and additional user profile data. This database is accessed by the API routines CreateAccount 288, Login 290 and GetProfile 292 that together authenticate a user and initialize communication between the user and the systems 10A and 10B, through the server 28-1 and the middle tier server 40. The box profile database 282 archives information related to individual media-based devices, including the respective channel lineups. This database 282 is accessed by GetProfile 294 as well as GetChannelLineUp 296 in response to a user request to view information related particularly to the DVR 37 that the user wants to operate. The EPG database 284 may either be a commercial database such as an online service 54 or a database containing already extracted information from a commercial source. This database 284 is accessed by GetEPG 298 and ShowGuide 300 to retrieve program

information. The box transaction database 286 includes information related to programs recorded by the DVR 37 and request sfor the DVR 37 to record future programs. This database 286 exchanges information with the middle tier server 40 every time a request is made through the AddRequest routine 304, or DeleteRequest routine 3006. It is also accessed in response to user request to view related information through GetReplayGuide 302. Applicant's Specification pg. 61-62, ¶ [0166].

Applicants' presently claimed invention is expressly directed to a computer-implemented method for enabling a user to remotely control a media based device and to access related information from a web portal and an API that permits data retrieved from a database to fit a format associated with the web portal. Specifically, Applicants' presently pending claims are directed to an API that permits the content to fit the format and look-and-feel of the particular web portal. Applicant's Specification pg. 59-60, ¶ ¶ [0162, 0163].

For example, Independent Claim 1 expressly recites the step of "providing an Application Program Interface (API) that, in operation, permits data retrieved from at least one database concerning the media-based device to fit a format associated with the web portal."

The remaining Independent Claims, Claims 35, 58, and 60 recite similar limitations. For example, Independent Claim 35 expressly recites the steps "executing at least one API routine to retrieve from at least one database data concerning the media-based device, the at least one database being in communication with the media-based device through a second network; and fitting the retrieved data, via the API, to a format associated with the web portal."

Independent Claims 58 and 60 recite similar limitations. For example, Claim 58 recites: "program code for transmitting to the network information in accordance with the retrieved data, the program code being transmitted to an Application Program Interface (API) that enables the

web portal to receive an integrated presentation of the media-based device." And Independent Claim 60 expressly recites the step of "receiving at the web portal an integrated presentation of the media-based device from an Application Program Interface (API)."

Wong '364 does not anticipate Applicants' presently claimed invention. Unlike Applicants' presently claimed invention, Wong '364 does not teach or suggest to an API that permits the content to fit the format and look-and-feel of the particular web portal.

Rather, Wong '364 appears generally directed to a system and method to facilitate selection and programming operation of an audio/visual system, such as to record a predetermined audio/visual program when it is broadcast. The Wong '364 system include a local computer that may connect to a server system through a network infrastructure, such as the World Wide Web. The server system includes a searchable database, which may accessed as a website, including information about numerous audio and/or visual programs. The local computer is programmed to connect to the server system for searching and/or filtering through the program information of the database. Wong '364 Col. 3 lines 36-49.

Wong '364 further appears to teach that the user may employ the local computer to select one or more programs and have a token assigned to one or more recipients (who may also include the user) representing program criteria for each selected program. Wong '364 Col. 3 lines 50-53. Such a token includes program criteria representing a specific audio and/or visual program in a known form that may be employed to program a recording system to record a corresponding broadcast program base on the corresponding token. Wong '364 Col. 3 lines 60-65. Wong '364 merely teaches using a token that includes program criteria representing a specific audio and/or visual program in a **known form**. There is simply no teaching in Wong

'364 of utilizing an API that permits the content to fit the format and look-and-feel of the particular web portal.

Since Wong '364 neither teaches or nor suggests an API that permits the content to fit the format and look-and-feel of the particular web portal, Wong '364 naturally does not teach or suggest the additional steps of Claim 1:

receiving a user request from the user; and

in response to the user request, initiating at least one API routine to retrieve from the at least one database the data concerning the media-based device, the at least one database being in communication with the media-based device through a network.

To anticipate a claim, "each and every element set forth in the claim [must be] found, either expressly or inherently described, in a single . . . reference." *Vergall Bros. V. Union Oil Co. of California*, 814 F.2f 628, 631 (Fed. Cir. 1987) (M.P.E.P. Section 2131). Consequently, since Wong '364 does not teach or suggest utilizing an API that permits the content to fit the format and look-and-feel of the particular web portal, Wong '364 simply also does not teach or suggest every element of the claimed invention and, therefore does not anticipate Applicant's presently pending Independent Claims.

III. SUMMARY

Consequently, Independent Claims 1, 35, 58, and 60 are allowable for at least all of the reasons stated above. The remaining claims are all dependent on these allowable independent claims and are therefore allowable for at least the reasons stated above.

If there are any matters that may be resolved or clarified through a telephone interview, the Examiner is respectfully requested to contact Applicants' undersigned representative at (312) 913-0001.

Respectfully submitted,

McDonnell Boehnen Hulbert & Berghoff LLP

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Thomas E. Wettermann
Reg. No. 41,523